

5.3.1 U.S. Heating and Air-Conditioning System Manufacturer Shipments, by Type (Including Exports)

<u>Equipment Type</u>	<u>1990 (thousands)</u>	<u>2000 (thousands)</u>	<u>2005 (thousands)</u>	<u>2005 Value of Shipments (\$million) (6)</u>
Air-Conditioners (1)	2,920.0	5,346.0	6,472.3	5,836.6
Heat Pumps	808.7	1,539.2	2,336.0	2,226.4
Air-to-Air Heat Pumps	808.7	1,339.4	2,113.9	1,869.5
Water-Source Heat Pumps (2)	N.A.	199.8	222.0	356.9
Chillers	N.A.	38.1	37.3	1,092.6
Reciprocating	N.A.	24.8	24.1	462.1
Centrifugal/Screw	5.0	8.5	5.8	566.3
Absorption	N.A.	4.8	7.4	64.2
Furnaces	2,368.9	3,680.7	3,623.7	2,143.7
Gas-Fired (3)	1,950.5	3,104.2	3,512.5	2,081.0
Electric	280.0	455.0	N.A.	N.A.
Oil-Fired (4)	138.5	121.5	111.2	62.8
Boilers (5)	316.1	368.4	369.7	N.A.

Note(s): 1) Includes exports and gas air conditioners (gas units <10,000 units/yr) and rooftop equipment. Excludes heat pumps, packaged terminal air conditioner units, and room air conditioners. Approximately 95% of unitary air conditioners shipped are 5.5 tons or less (65,000 Btu/hr). ~70% residential and ~30% commercial applications. 2) Includes ground-source heat pumps, which numbered around 80,600 units shipped in 2005. 3) Gas-fired furnace value of shipments are based on Census unit shipment data, which is about 873,500 units higher than the industry data shown. 4) Oil-fired furnace value of shipments are based on Census unit shipment data, which is approximately 33,600 units lower than the industry data shown. 5) 61% of shipments were gas-fired and 39% were oil-fired. 96% of shipments are cast iron and 4% are steel. 6) Total 2005 value of shipments for heating, ventilation, and air conditioning (HVAC) and refrigeration was \$24.7 billion, including industrial and excluding boilers and electric furnaces.

Source(s): ARI, Statistical Profile, Oct. 7, 2004, Table 17, p. 24, Table 18, p. 25, and Table 22, p. 30 for air conditioner, air-to-air heat pump, and 1990 centrifugal/screw chiller shipments; ARI, ARI Koldfax, Feb. 2005, p. 1 for 2004 air conditioner shipments; GAMA, GAMA Statistical Highlights: Ten Year Summary, 1987-1996; GAMA, GAMA Statistical Highlights: Ten Year Summary, 1994-2000 for furnace and boiler shipments; GAMA, GAMA News Release, Jan. 2005 for 2004 boiler shipments; GAMA, Statistical Highlights, Mar. 2005, p. 4 for 2004 furnace shipments; Appliance Manufacturer, Feb. 1998 for electric furnace; DOC, Current Industrial Reports: Refrigeration, Air Conditioning and Warm Air Heating Equipment, MA333M(06)-1, July 2007, Table 2, for water-source heat pumps, chillers, and value of shipments; Appliance Magazine Appliance Statistical Review, 54th Annual Report, May 2007, p. S1 - S4 for 2005 boiler data; ARI Statistical News Releases 2005, <http://ari.org/newsroom/stats/2005/>; and GAMA News Release, Jan. 2007 for note 5.